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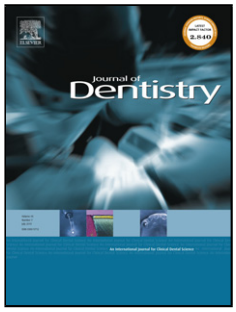

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Leadership in Academic Dentistry
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Part 15

Leadership in global oral health

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In the new era of global health, a closer integration of oral health with the wider body of medicine and health systems will be essential. This will ensure that oral diseases are addressed alongside the other non-communicable diseases. Mainstreaming patient-centred primary prevention, underpinned by transforming educational and workforce systems to create future leaders in global oral health, are vital if the challenge of reducing inequalities in oral health and the aspiration of universal coverage of oral health services are to be realised.

Keywords: Global oral health, Social determinants, Common Risk Factors, Universal Health Coverage, Advocacy, Leadership

Introduction

The burden of oral disease is a growing global problem and is accompanied by marked inequalities both within and between countries. Advances in dental care have resulted in major improvements in oral health, but these have mainly occurred in high-income countries and, even then, have not benefitted the entire population. All health professionals face three major challenges. The poor in society suffer a disproportionately high level of disease; effective population-wide disease prevention remains to be implemented; and affordable, appropriate care is not accessible to all. This paper will examine how strategies can be developed to improve global oral health through closer integration into healthcare and the development of participatory leadership skills to reduce the burden of oral diseases.

Burden of oral disease -need to think differently

With a global prevalence of 35% and affecting 3.9 billion people worldwide, untreated caries in the permanent dentition is the most prevalent of all conditions in the entire Global Burden of Diseases, Injuries, and Risk Factors (GBD)study [1]. Severe periodontitis in adults and untreated caries in deciduous teeth were the sixth and tenth most prevalent conditions respectively. Not only is the prevalence of oral disease high in relation to all other diseases, but there are very marked inequalities in the distribution of all the major oral diseases, including oral cancer. The global distribution of dental caries, from which it can be seen that there is an inverse gradient in prevalence of dental caries from high to low -income countries of disease is illustrated in Fig.1. Similar inverse prevalence gradients are also seen in periodontal disease and oral cancer [2]. Oral diseases additionally have a significant adverse impact on the quality of life. Pain arising from dental disease is the most important cause of disturbed of sleep in children, contributing to poor performance in school. In adults and older people, dental pain, suffering and discomfort severely restrict dietary intakes and social functioning [3]. These high levels of

oral disease and their wider impact on health and development constitute a major public health challenge, especially in underprivileged groups in all countries [4]. Regrettably, even where overall improvements have occurred, inequalities persist [5].

To achieve sustainable improvements in oral health and a reduction in oral health inequality, strategies will be required to both manage the existing burden of disease and deliver effective prevention. The traditional high-income country model of dental care is inappropriate for the management of disease at the global level. It is not only unaffordable [6] but in low and middle-income countries the necessary human resource is simply unavailable or distributed unequally (Fig. 2) [2], so very different models of care will be required. As Garcia and Tabak [7] have stated, "tackling global oral health inequalities will require creativity, diligence and a strong commitment to partner with the many players involved in global health. … Framing oral health as a vital part of overall health will enable the integration of oral health as part of a broader global health agenda that includes, for example, tobacco and alcohol control, clean water and sanitation, maternal and child health, and health systems research."

Broader view of disease prevention

Inequalities in both oral and general health pose significant challenges for policy makers and those in public health. Kwan and Petersen [8] have attributed the failure of most approaches to improve oral health and reduce inequalities to a reliance on measures that focus on downstream factors, such as lifestyle and behavioral influences [9-11], rather than working upstream and addressing the key root causes. The social determinants of health (Fig. 3) are the circumstances into which people are born, grow, live, work and age [12] and they largely determine the behaviours people adopt and the choices they make. The

unequal distribution of all these determining factors accounts for the persistent and growing global differences in health status and disease burden.

The priorities for oral disease prevention also include the control of dietary sugars and tobacco use, the crucial risk factors for dental caries and periodontal disease [13- 16], and making healthy choices the easier choices [17]. These shared risk factors (Fig. 4) provide the conceptual basis for the Common Risk Factor Approach [18], based on the premise that controlling a small number of important clustered risk factors should have a major impact on a number of common chronic diseases, including oral conditions, at a lower cost than narrow disease-specific approaches [19]. This approach also paves the way for the closer integration of oral health into strategies addressing the non-communicable diseases (NCDs), particularly cancers, cardiovascular disease, chronic respiratory diseases and diabetes, that are the leading cause of mortality and morbidity in the twenty-first century. The importance of this closer integration of oral and general health was acknowledged in the Oral Health Action Plan adopted by the 60th World Health Assembly in 2007 [20], which emphasized the intrinsic link between oral health, general health and quality of life and identified the need to incorporate oral health into programmes for the integrated prevention and management of chronic disease. In the same document, the ministers of health called for the creation of innovative workforce models to integrate essential oral healthcare into primary healthcare, which is also one of the key strategies set out in the World Dental Federation's (FDI's) Vision 2020[21].

Integrated strategy to improve global oral health

Historically, public health policies have addressed individual diseases in isolation. To counter the growing burden of NCDs, to the list of which must be added oral diseases, Frenk [22] has argued for strong intersectoral action and a "horizontal" approach that

addresses a number of diseases at the same time. This approach recognizes the role of the common risk factors discussed in the previous section and the fact that the major determinants of chronic disease lie outside the health sector. Action plans to reduce the burden of NCDs, including oral diseases, based on this approach should be implemented early in the life course and directed at upstream interventions at the level of national policy.

In the field of global oral health, a logical strategy would involve an orientation towards the UN Sustainable Development Goals (SDGs) [23]. This would require a participatory leadership approach engaging multiple stakeholders in an intersectoral arrangement involving not only health and social care partners, but also industry, economists, researchers, policy makers and with the patient and their communities at the centre. Dentistry has a track record of collaboration between its three major global partners, namely WHO Oral Health; the International Association for Dental Research (IADR) and the FDI. The complementary agendas and common interests in global health of these organisations, including alignment to the NCD Alliance, create opportunities for participatory leadership within and between the oral and general health specialties.

It is widely recognised that physicians and related health professionals have a role in promoting health equity, but oral health professionals are also in a position to engage actively in promoting oral health equity, both for their patients and the wider community [24]. Primary care is the first point of contact with the health service and is the setting in which most care - both general and oral - is provided. Oral health teams, collaborating with primary care teams, have the largely unexploited potential to be important advocates, enablers and mediators for oral health. Because the risk factors for oral and general health are the same, such activities will also promote good general

health. If oral healthcare is to be properly integrated with healthcare in general, it is also essential that all members of the oral healthcare team understand the importance of the social determinants of oral health and integrate their activities with other groups (Table 2).

The WHO Constitution [25] asserts that enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being. In the Adelaide Statement the WHO [26] advocated for a Health in all Polices (HiAP) approach as an important strategy to advance this human right. The evidence that oral diseases share common risk factors and determinants with other NCDs justifies the inclusion of oral health in a HiAP approach. This would lead to new intersectoral partnerships [27] and would shift the predominant focus of oral health away from technical interventions towards one based on social justice and consideration of the social determinants of health.

Why Universal Health Coverage matters

The World Health Organization defines Universal Health Coverage (UHC) as a state of health system performance, when all people receive the quality health services they need without suffering financial hardship [28]. The term denotes the nature of services provided as well as the range of health determinants addressed under the rubric of universality. UHC has become the most widely used phrase in the global discourse on access and affordability of health services since its adoption by the World Health Assembly in 2005. It also features among the targets under the overarching health goal of the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015 [23]. UHC has three dimensions; health care, which include ensuring access to a wide range of promotive, preventive, curative, and rehabilitative health services at different levels of care; health coverage, that is inclusive of all sections of the population, and health protection, that promotes and protects health through its social determinants. These services should be

delivered at an affordable cost, so that people do not suffer financial hardship in the pursuit of good health. It is of the utmost importance that oral health care is made a part of the essential health services available through UHC so that optimal oral health care becomes affordable, accessible and available for all.

Future leaders of global oral health

Effective leadership in health is essential if the strategies outlined above are to be achieved and its importance is increasingly being recognised. Effective leadership is especially important for oral health if we are to deliver a reduction in the global burden of oral disease. This is especially true for low- and middle-income countries, where health systems often lack the structural efficiencies and enabling systems that can engage energetically with other sectors to influence positively many of the determinants of oral health that are conventionally outside the domain of the health sector.

A global increase in complex public health problems has prompted a call for more leaders in public health who can achieve health system transformation to deliver higher levels of equity and efficiency. The Lancet Commission on Health Professionals for a New Century [29] identified a lack of leadership as one of the global systemic failures and recommended major reforms in public health education. The commission proposed a new framework for professionalism for the 21st century that should 'promote quality, embrace teamwork, uphold a strong service ethic, and be centered on the interests of patients and populations' [29]. The authority of public health leaders in the future will arise from their ability to convince others of the central importance of population health and well-being through influence rather than control. Kimberly [30] stated that future public health leaders need to commit to a more collaborative type of leadership, whereby

responsibility and accountability are shared among those involved in the decision-making process and the outcomes.

To bring about change in an oral health care system, a leader should have the vision to set goals that entrench effectiveness in the system, while preserving equity, a key to achieving distinctly better outcomes in oral health and development. In addition, an effective leader is a successful resource mobilizer, and ensures that all available resources are utilized efficiently through optimization. A leader also builds a strong team by enabling people to thrive in an environment where they exceed their own capabilities, by enhancing their capacity and commitment, and steers them in the desired direction with clear and reassuring guidance as and when needed.

Advocacy and partnerships in oral health leadership

Oral health professionals have opportunities to become strong advocates for upstream policy changes that can reduce health-harming social conditions and close the inequality gap in disease, by working collectively at the community and national levels through their professional dental organisations. This is not a role generally embraced by oral health professionals, but national dental organisations have it within their power to make their voice heard and become advocates for policies that will address these inequalities effectively. By shifting the policy focus toward common risk factor reduction and upstream interventions, the dental profession can expand significantly their alliances with other chronic disease stakeholders and leverage that collective influence as they seek to reduce sugar consumption, increase access to healthy diets reduce tobacco and excessive alcohol consumption and avoid the other risk factors that contribute to inequalities in oral and general health. Advocating for common risk factor reduction and upstream interventions will allow dentistry to take part in championing the value of

health equity, create clarity of goals, and further integrate oral health into general health at all levels.

If the oral health community is to be effective in its advocacy effort it will be essential to develop strategic partnerships with those engaged in action against NCDs in general. The most effective organisation engaged in this regard is the NCD Alliance. Established in 2009, it is a network of over 2,000 civil society organizations in more than 170 countries with the mission to combat the NCD epidemic by putting health at the center of all policies. Strategic partners include the United Nations, WHO and governments, and the long-term goals of the organization are aligned with the WHO Global NCD Action Plan 2013-2020 [31]. The FDI and IADR have taken a lead among dental organisations in joining the NCD Alliance and a tangible output from this partnership has been the publication of a joint FDI/NCD Alliance Policy Brief on "Accelerating action on oral health and NCDs: achieving an integrated response [32]." This makes a number of practical recommendations for action (Table 3), that are consistent with the goals discussed in this paper.

Conclusions

Current approaches to the control of oral disease are of limited effectiveness and economically unsustainable. A radical change in policy is called for and the scope of the horizontal HiAP approach, that addresses a number of diseases at the same time and uses the common risk factor approach, should be widened to include oral diseases. The oral healthcare workforce will require decisive, transformational leadership to achieve the necessary integration of oral health into general healthcare that this will require. At the same time more effective advocacy is needed to make the case for the wider contribution that oral healthcare professionals can make to the reduction in the global NCD burden

and improved general health. These are challenging aims, but their realisation has the potential to achieve the reintegration of oral healthcare into the wider body of medicine, as part of the resilient, responsive workforce needed to meet the healthcare challenges of the twenty-first century. In this way, oral healthcare professionals will be making a major contribution to effective population-wide disease prevention and the provision of care that is affordable, appropriate and accessible to all.

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Figures and Tables

Fig. 1: Global inequalities in the global prevalence of dental caries

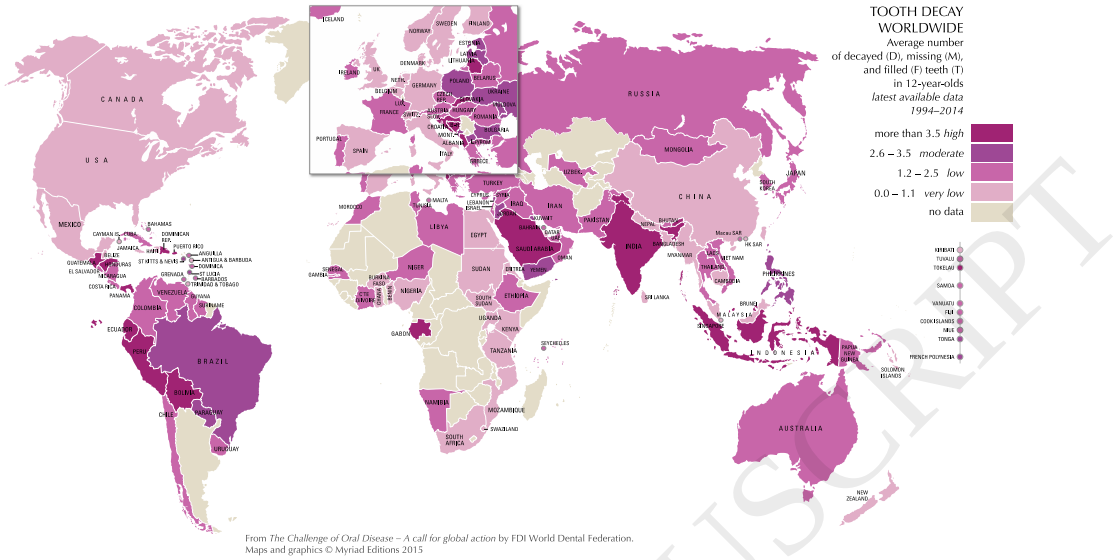


Fig. 2: Inequalities in the global distribution of oral health personnel: the burden of disease/provider ratio

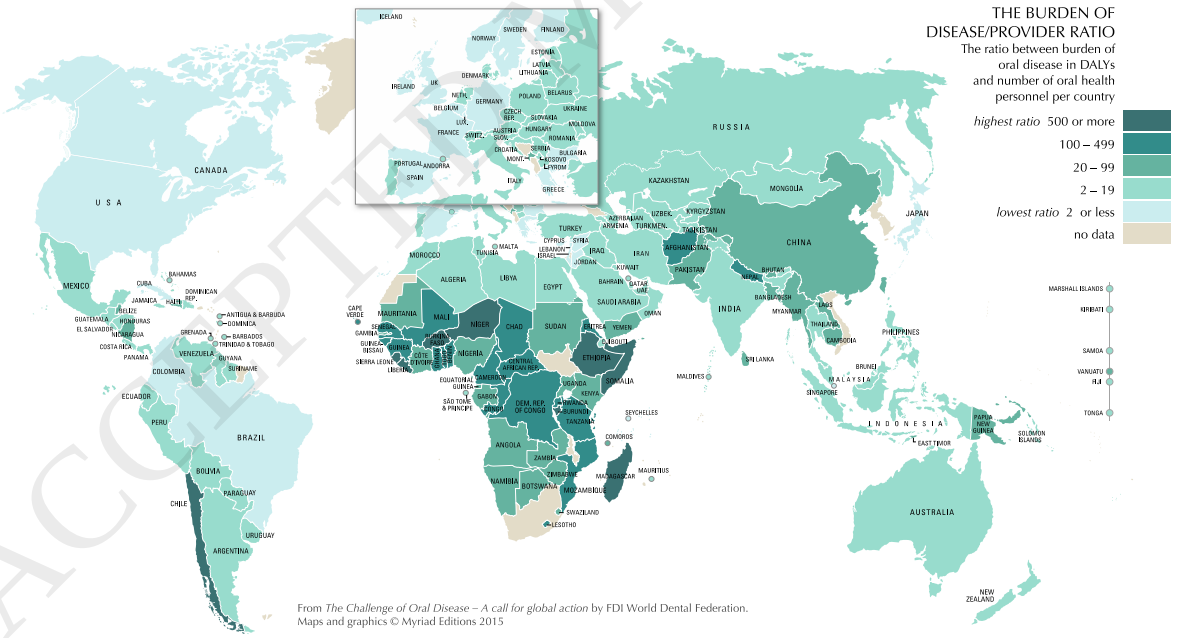


Fig. 3 The Social Determinants of Health [12]

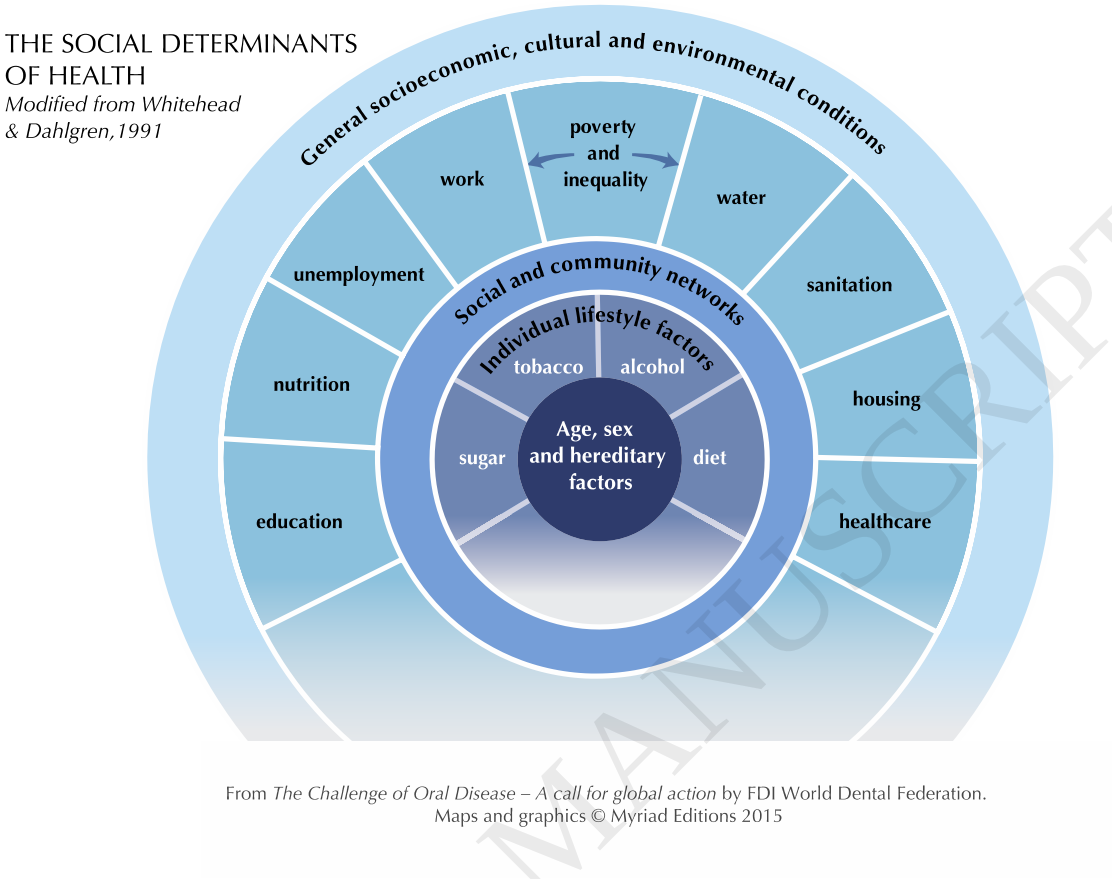
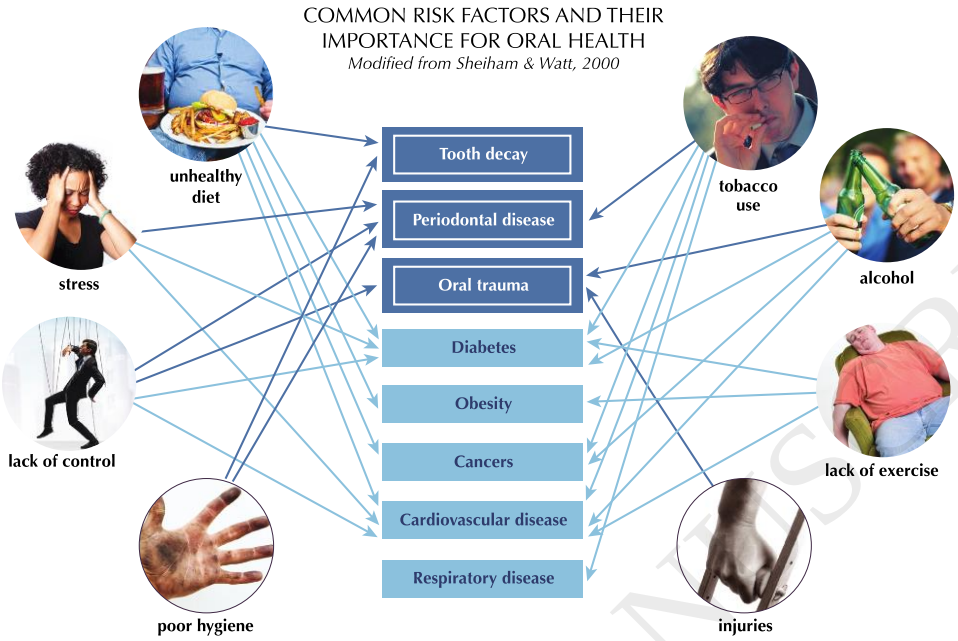


Fig. 4: Common Risk Factors and their importance for oral health [25]



From *The Challenge of Oral Disease – A call for global action* by FDI World Dental Federation.
Maps and graphics © Myriad Editions 2015

Table 1: Taking action on oral health equity: things the oral health team should do. Based on: Williams DM, Sheiham A, Watt RG [23].

1	All members of the oral health team should acquire a thorough understanding of the importance that social determinants play in oral as well as general health. They should have a thorough understanding of how the conditions in which people are born, live, work and age can affect their health, and how they can act to tackle these.
2	Dentists and the oral health team should engage in partnership with communities to help them better understand and tackle the social, economic and environmental factors that determine oral health and increase inequalities.
3	Dentists and the oral health team should engage with colleagues such as primary health care professionals in the development of cross-sectoral partnerships, so that oral health promotion strategies become incorporated into all strategies for health.
4	Dentists should become advocates for health, particularly oral health, with their patients and the wider community. This should include an emphasis on acting as enablers, helping to make healthy choices the easier choices and empowering people to take control of their own lives and health.

Table 2: Accelerating action on oral health and NCD: partnership between FDI and the NCD Alliance. Based on FDI World Dental Federation and the NCD Alliance. [28]

Recommendations on integrating oral health into the NCD agenda
Improve access to health services and ensure more supportive social conditions for disadvantaged groups to reduce social inequities.
Adopt both a health and oral health in all policies approach to minimise and manage risks to oral health, general health, and health equity arising from policies in other sectors.
Implement cost-effective evidence-based population-wide oral health promotion measures as a way of protecting overall health and well-being.
Strengthen inter-professional collaboration between oral health and other health professionals to improve prevention and management of co-morbidities, for example through shared health records.
Include oral health in curricula for other healthcare professionals, and ensure oral healthcare professional education addresses associated diseases and interdisciplinary care.
In LMICs, integrate oral and NCD care into current programmes, such as those for HIV/AIDS, to improve collaboration and capitalise on existing systems.
Integrate oral and NCD care into broader efforts to achieve UHC
Include oral health and NCD workforce planning in overall planning for human resources for health
Strengthen healthcare professional education and collaboration to ensure oral disease and NCD risks are appropriately considered in maternal and paediatric care.
Implement community-based initiatives, such as school education programmes, to promote healthy behaviours from an early age.
Ensure healthy environments for children, for example through banning sugar sweetened beverages and unhealthy snacks in schools and ensuring healthy food is available
Systematically include oral disease and NCD surveillance in epidemiological monitoring, including surveillance of common modifiable risk factors.
Promote research into effective interventions for oral health and NCDs, focusing on what works in the area of social and behavioural interventions to tackle the common modifiable risk factors.
Adopt an oral health in all policies approach.
Integrate oral health perspectives into national NCD action plans and other relevant NCD governance mechanisms
Fully integrate oral health into Sustainable Development Goals strategies and monitoring frameworks